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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,358	01/17/2002	Friedrich J. Ehrlinger	ZAHFRI P 396US	6919
20210	7590	01/20/2004	EXAMINER	
DAVIS & BUJOLD, P.L.L.C. FOURTH FLOOR 500 N. COMMERCIAL STREET MANCHESTER, NH 03101-1151			PANG, ROGER L	
			ART UNIT	PAPER NUMBER
			3681	

DATE MAILED: 01/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/031,358

Applicant(s)

EHLINGER, FRIEDRICH J.

Examiner

Roger L Pang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on December 4, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-18, 21-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17, 18 and 24-29 is/are allowed.
- 6) ☒ Claim(s) 21-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

The following action is in response to the amendment filed for application 10/031,258 on November 10, 2003.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

It is suggested that applicant remove "means" from the abstract.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The amendment filed on June 24, 2003 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: applicant has never disclosed an automatic transmission within the original specification. The word "shaltgetriebe" appears to be a generic word for gearbox (see attached German-English translation). However, to say that the word "gearbox" encompasses all types of transmissions, including automatic, may be too broad.

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Applicant has not disclosed any automatic transmission controls or components, and the original claims make specific reference to only a manual transmission.

Applicant is required to cancel the new matter in the reply to this Office Action.

Since "shaltgetriebe" literally translates to "transmission", it is suggested that applicant remove both "manual" and "automatic", thereby allowing for the possibility of an automatic transmission, while avoiding new matter problems.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sherman.

Sherman teaches an electrodynamic drive system for a vehicle located between a drive source 11 and a manual transmission (Col. 2, lines 1-4), having a single planetary gear set 10, which includes a sun gear 24, an internal gear 28, a planetary gear 25 and a planetary gear carrier 26, of which the planetary carrier is connected to the manual transmission, the internal gear is connected to the drive source and the sun gear is bound to at least one electric motor 14, with a shift clutch 33 between the planetary gear carrier and the sun gear operable to bypass the planetary gear set (Fig. 1), and a control. Sherman lacks the teaching of said electric motor being regulated in a 4-quadrant operation, however, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Sherman to employ an electric motor and control operable in a 4-quadrant operation, since it has been held that where the general conditions of a

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claim are disclosed in prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sherman in view of Toyoda. Sherman teaches an electrodynamic drive system for a vehicle located between a drive source 11 and a manual transmission (Col. 2, lines 1-4), having a single planetary gear set 10, which includes a sun gear 24, an internal gear 28, a planetary gear 25 and a planetary gear carrier 26, of which the planetary carrier is connected to the manual transmission, the internal gear is connected to the drive source and the sun gear is bound to at least one electric motor 14, with a shift clutch 33 between the planetary gear carrier and the sun gear operable to bypass the planetary gear set (Fig. 1). Sherman lacks the teaching of a plurality of electric motors on the sun gear acting upon the planetary drive. Toyoda teaches a transmission, wherein a plurality of motors 62,63 act upon a single component 86 of a reduction drive. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Sherman to employ a plurality of electric motors in view of Toyoda in order to provide maximum efficiency in different operational regions (Col. 3).

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sherman in view of Schneider '618. Sherman teaches an electrodynamic drive system for a vehicle located between a drive source 11 and a manual transmission (Col. 2, lines 1-4), having a single planetary gear set 10, which includes a sun gear 24, an internal gear 28, a planetary gear 25 and a planetary gear carrier 26, of which the planetary carrier is connected to the manual transmission, the internal gear is connected to the drive source and the sun gear is bound to at least one electric motor 14, with a shift clutch 33 between the planetary gear carrier and the sun gear operable to

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bypass the planetary gear set (Fig. 1). Sherman lacks the teaching of said shift clutch being a dog clutch. Schneider teaches a shift clutch 32 that comprises of a dog clutch. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Sherman to employ a dog clutch in view of Toyoda in order to provide a simpler clutch actuating structure.

Allowable Subject Matter

Claims 17-18, and 24-29 are allowed.

FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is (703) 305-3597. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

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I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (703) 305-3597) on _____ (Date)

Typed or printed name of person signing this certificate:

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roger L Pang whose telephone number is 703-305-0445. The examiner can normally be reached on 5:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9326.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2168.

A handwritten signature in black ink, appearing to be 'R. Pang', with a long horizontal stroke extending to the right.

Roger L Pang
Patent Examiner
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January 12, 2004